

Rare Nootropic Effects of Chronic Alcohol Use Months to Years After Cessation

Sometime in 2022

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Introduction

It has been documented in rare cases that brain injuries can lead to the abrupt onset of savantism. Although many functions are impaired, specific functions may be enhanced. One type of brain damage not explored for its rare nootropic effects is that associated with chronic alcohol use. Only by properly understanding the underlying mechanisms which often result in IQ reduction in those who consume alcohol (not brain cell death as was long-believed) can rare instances in which nootropic effects have been observed be properly understood. With such an understanding, it may be possible to duplicate the effects in controlled studies.

Abstract

As the brain develops, axonal pathways are established within the brain which are associated with myriad specific functions. Pathways established in youth are highly efficient and alterations to these patterns of data traffic within the brain tend to lead to inefficiencies. Alcohol use tends to lead to the establishment of less efficient axonal pathways, as has been demonstrated in studies. However, the exact mechanism through which this occurs was unclear.

This author believes that alcohol molecules combine into short-lived acrylic chains within the brain which have electrical properties which force signals to follow the acrylic chain (as electrons follow wires) rather than whatever path the signals might have otherwise followed. When these chains persist with chronic alcohol use, novel and arbitrary axonal pathways are established. The original pathway set may be termed the A-set and the novel set of pathways may be termed the B-set.

In most cases in which these novel axonal pathways are established through years of alcohol abuse, the brain entirely relies upon the B-set pathways which are less efficient at performing computational tasks and it permanently loses the ability to switch back to the A-set, particularly if alcohol use is ongoing. When the use of alcohol is sustained for a period of years (but not decades) and is ceased, in some cases, the brain may be able to not only switch back to the A-set but may also retain a unique ability to access both sets of axonal pathways on an alternating basis or, in some rare instances, may access both sets of pathways simultaneously.

To draw a comparison with a computer processor, imagine what would happen if a standard semiconductor processor operating at a particular frequency or "clock speed" was able to simultaneously perform two unrelated tasks using the same architecture by injecting instructions according to two clock speeds, one upon the other, simultaneously. (In fact, this author published a paper

about doing exactly this with a computer processor in 2023.) Most clock speeds/frequencies would not be compatible and would lead to signals “stepping upon” one another, however, there would always, particularly in a neuromorphic system, be the potential for A-set and B-set pathways to work harmoniously. During these brief windows, a person might experience what is termed a “flash of genius” and may have remarkable insights suddenly appear before their eyes as a result of an exponential increase (if short-lived) of their own intelligence. Key to accessing these flashes of genius, it would logically follow, would be purposefully fooling the brain into switching between these A-set and B-set pathways in order to make it more likely that both may be utilized simultaneously. The more this happens, the more opportunities there are for higher-order functions to be performed which exceed the known bounds of human intelligence.

Conclusion

Any insult to neural tissue which forces the establishment of novel axonal pathways may lead to savantism only in those cases in which the original pathways eventually re-assert themselves and when these two sets of axonal pathways naturally complement one another.